

What is claimed is:

- 1           1.     A flexible pouch for packaging a product comprising:  
2                 a front panel and a back panel each having an upper edge, a lower edge  
3                 opposite said upper edge, and side edges extending therebetween said upper  
4                 and lower edges, wherein said front panel and said back panel are joined  
5                 together along said side edges and said lower edge to contain the product;  
6                 a first closing seal extending along an upper edge of said joined front  
7                 and back panel, wherein said first closing seal is formed a predetermined length  
8                 from said open edge and there is no dead space inside the pouch between the  
9                 product and said first closing seal; and  
10                a second closing seal extending between said first closing seal and said  
11                upper edge, wherein some of the product is trapped between said first closing  
12                seal and said second closing seal such that said upper edges of said front panel  
13                and said back panel are sealed together.
- 1           2.     A flexible pouch as set forth in claim 1 wherein said product is a  
2                 carbonated beverage.
- 1           3.     A flexible pouch as set forth in claim 1 wherein said front panel  
2                 and said back panel is a laminate material including a metalized foil paper layer  
3                 and a cast polypropylene layer.
- 1           4.     A flexible pouch as set forth in claim 1 further comprising a  
2                 fitment disposed in either one of said front panel or said back panel for  
3                 dispensing the product from the pouch.
- 1           5.     A flexible pouch as set forth in claim 4 wherein said fitment is a  
2                 resealable, interlocking closing means.
- 1           6.     A flexible pouch as set forth in claim 4 wherein said fitment is a  
2                 screw-on cap.

1           7.     A flexible pouch as set forth in claim 1 wherein said front panel  
2     and said back panel are joined together by a first seal at low temperature  
3     positioned along said side edges and said lower edge and a second seal at a  
4     higher temperature applied adjacent the first seal and the product.

1           8.     A method of forming and filling a flexible pouch for packaging  
2     a product, said method comprising the steps of:  
3             forming a panel having an upper edge, a lower edge opposite the upper  
4     edge, and side edges extending therebetween the upper and lower edges;  
5             joining two panels by sealing together the side edges and lower edge;  
6             opening the pouch;  
7             filling the pouch with the product;  
8             closing the filled pouch by forming a first closing seal extending along  
9     an upper edge of the pouch a predetermined length from the upper edge, such  
10    that there is no dead space inside the pouch between the product and the first  
11    closing seal;  
12            forming a second seal between the first closing seal and the upper edge,  
13    wherein some of the product is trapped between the first closing seal and the  
14    second closing seal, to seal the upper edges of the panels together; and  
15            finishing the pouch.

1           9.     A method as set forth in claim 8, wherein the panel is formed  
2     from a laminate material including a metalized foil paper layer and a cast  
3     polypropylene layer.

1           10.    A method as set forth in claim 8 wherein said step of joining the  
2     panel together further includes the steps of applying a first seal at low  
3     temperature positioned along the side edges and the lower edge of the panels  
4     and applying a second seal at a higher temperature positioned adjacent the first  
5     seal and the product.

1           11.    A method as set forth in claim 8 wherein said step of joining the  
2   lower and side edges of the pouch together includes the step of sealing the  
3   edges using a combination of heat and pressure.

1           12.    A method as set forth in claim 8 wherein said first closing seal is  
2   an ultrasonic weld.

1           13.    A method as set forth in claim 8 further comprising the step of  
2   inserting a fitment in the pouch panel for dispensing the product from the  
3   pouch.

1           14.    A method as set forth in claim 13 wherein said fitment is a  
2   resealable, interlocking closing means.

1           15.    A method as set forth in claim 13 wherein said fitment is a  
2   screw-on cap.

1           16.    A method as set forth in claim 8 wherein said product is a  
2   carbonated beverage.

1           17.    A method of forming and filling a flexible pouch for packaging  
2   a carbonated product, said method comprising the steps of:

3               forming a panel having an upper edge, a lower edge opposite the upper  
4   edge, and side edges extending therebetween the upper and lower edges;

5               joining two panels by sealing together the side edges and lower edge by  
6   applying a first seal at low temperature along the side edges and lower edge  
7   and applying a second seal at a higher temperature adjacent the first low  
8   temperature seal and the product;

9               opening the pouch;

10              filling the pouch with the product;

11 closing the filled pouch by forming a first closing seal extending along  
12 an upper edge of the pouch a predetermined length from the upper edge, such  
13 that there is no dead space inside the pouch between the product and the first  
14 closing seal;

15 forming a second seal between the first closing seal and the upper edge,  
16 wherein some of the product is trapped between the first closing seal and the  
17 second closing seal, to seal the upper edges of the panels together; and  
18 finishing the pouch.

1 18. A method as set forth in claim 17, wherein the panel is formed  
2 from a laminate material including a metalized foil paper layer and a cast  
3 polypropylene layer.

1 19. A method as set forth in claim 17 wherein said first closing seal  
2 is an ultrasonic weld.

1 20. A method as set forth in claim 17 further comprising the step of  
2 inserting a fitment in the pouch for dispensing the product from the pouch.

1 21. A method as set forth in claim 20 wherein said fitment is a  
2 resealable, interlocking closing means.

1 22. A method as set forth in claim 17 wherein said fitment is a  
2 screw-on cap.

1 23. A method as set forth in claim 17 wherein the first low  
2 temperature seal is at about 180°F and the second high temperature seal is at  
3 about 260°F.

1 24. A method as set forth in claim 23 wherein the first low  
2 temperature seal has a greater width than the second high temperature seal.